



Scaling tests for overlap fermions

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We present results on the scaling behaviour of mesonic observables with Ginsparg-Wilson fermions in quenched QCD. Using the overlap operator we compute two-point correlation functions on four lattices with $5.8458 \leq \beta \leq 6.1366$. We perform continuum extrapolations for the pseudoscalar decay constant and the vector mass.

Furthermore we compute the non-perturbative renormalization of the scalar density. We interpolate our data to the physical kaon mass and match it with continuum results for $O(a)$ -improved Wilson fermions. With this method we are able to obtain Z_S over a range of lattice spacings and extrapolate the renormalized quark condensate to the continuum limit.

A full account of our results can be found in [1].

- [1] J. Wennekers and H. Wittig, *On the renormalized scalar density in quenched QCD*, *JHEP* **09** (2005) 059, [[hep-lat/0507026](http://arxiv.org/abs/hep-lat/0507026)].

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